

REMARKS

Claims 11-34 and 49-52 are pending.

**Foreign Priority:**

The indication that the foreign priority documents have been received and placed in the file is noted.

**Information Disclosure Statement:**

The indication that the documents on the Information Disclosure Statement were fully considered is noted.

**Drawings:**

The drawings were objected to by the Examiner because of Figures 5, 6, and 7, "Tarcking" should be --Tracking--.

The Replacements Sheets for Figures 5, 6, and 7 are included with the correction of the word noted in the Office Action.

The Examiner is requested to approve these drawing changes.

**Restriction Requirement:**

It is noted that the restriction requirement has been rewritten in section 1 of the Office Action. As the restriction was originally without traverse, the non-elected claims (1-10 and 35-48) have been cancelled. The Applicant reserves his right to file a divisional to the distinct invention.

**Reply to Rejections:**

**First Rejection:**

Claims 11-16 and 28-32 were rejected under 35 U.S.C. § 102(b) as being anticipated by Utsunomiya, et al. (USP 6,040,030, hereinafter "Utsunomiya"). This rejection is traversed.

Initially, the rejection under 35 USC 102 was incomplete as the Examiner failed to specifically point out where each and every claim limitation was found in the reference. See *Ex parte Levy* 17 USPQ 2d 1461, 1462 VPAI (Fed.Cir. 1990) (cited in the MPEP) wherein the Board stated as follows:

"The factual determination of anticipation requires the disclosure in a single reference of every element of the claimed invention. Moreover, it is incumbent upon the Examiner to identify where in each and every facet of the claimed invention is disclosed in the reference."

Even if the structure claimed was a possibility or probability from the reference, this cannot be relied on for a rejection under 35 U.S.C. § 102. See *Continental Can Co. USA, Inc. v. Monsanto Co.*, 20 USPQ 2d 1746, 1749 (Fed.Cir. 1991) wherein the Court stated as follows:

"Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient."

To more specifically point out the invention, the base claims have been amended for the convenience of the Examiner.

One of the objects of the present invention in the context claimed is to solve the problem associated with conventional structure, i.e., due to the receiving light sensitivities of the photoreceptors, the output signal level is reduced in a short wavelength band.

In order to solve the above problem, the present invention includes setting the groove depth so that a signal of a predetermined level can be ensured for both a light beam having a short wavelength and a light beam having a long wavelength.

Specifically, the present invention as defined in independent claim 11 includes:

the groove depth  $d$  satisfies the conditions of:

$$\lambda_1/n_1 \times (3/64) \leq d \leq \lambda_1/n_1 \times (13/64); \text{ and}$$

$$\lambda_2/n_2 \times (4/64) \leq d \leq \lambda_2/n_2 \times (12/64),$$

wherein  $n_1$  and  $n_2$  indicate refractive indexes of said optical recording medium for the first wavelength  $\lambda_1$  and  $\lambda_2$  respectively.

The present invention as defined in claim 28 includes:

said groove depth  $d$  satisfies the condition of:

$$\lambda_1/n_1 \times (3/64) \leq d \leq \lambda_1/n_1 \times (13/64),$$

wherein  $n1$  indicates a refractive index of said optical recording medium for the first wavelength  $\lambda1$ , and

a reflective index  $r1$  of said optical recording medium with respect to the first wavelength  $\lambda1$  is smaller than a reflective index  $r2$  with respect to the second wavelength  $\lambda2$ .

Utsunomiya et al. (USPN 6,040,030)

The Examiner alleges that the present invention as defined in independent claim 11 and its dependent claims 12 to 16, and independent claim 28 and its dependent claims 29 to 32 is anticipated by Utsunomiya et al., column 11, lines 1 to 5, etc.

However, Utsunomiya et al. merely teaches in the portion cited by the Examiner, a range of the groove depth  $d$  and a range of the refractive index  $n$  which are desirable for eliminating crosstalk and obtaining a tracking error signal of a predetermined level as an output signal.

Utsunomiya does not teach or suggest the features as defined in independent claim 11 or independent claim 28 of the present invention, i.e., the groove depth is set so that a signal of a predetermined level can be ensured for both a light beam having a short wavelength and a light beam having a long wavelength.

The independent claim 28 of the present invention includes that the reflective index  $r1$  for the wavelength  $\lambda1$  and the reflective index  $r2$  for the wavelength  $\lambda2$  is set so that the

reproduction is permitted with a short wavelength even when the detection sensitivity  $s_2/s_1$  of the photodetector is low.

Utsunomiya et al. fails to teach or suggest the characteristic feature of the present invention which permits the detection sensitivity of the photodetector to be compensated for when the detection sensitivity is low.

While the base claims have been amended, they are also nonobvious over the reference applied. There is no suggestion to modify the reference to arrive at the claimed invention without benefit of the applicant's disclosure. Also, as explained above, the claim structure solves a problem in the conventional structure. This is an unexpected result which must be given consideration in arriving at a rejection based on obviousness.

For the reasons set forth above, the Examiner is requested to reconsider and withdraw the rejection of the claims under 35 USC 103.

**Second Rejection:**

Claims 19-26 were rejected under 35 U.S.C. § 102(b) as being anticipated by Ogata, et al. (USP 5,940,364, hereinafter "Ogata"). This rejection is traversed.

With respect to base claim 19, the Office Action relies on Figure 1 and column 15, lines 41-50; column 17, lines 10-20. A review of these portions relied on by the Examiner do not show the

specifics of what is claimed in claim 19. Accordingly, a rejection under 35 U.S.C. § 102 is not viable. Also, the comments in the cases cited above that have been explained in the reply to the first rejection are also applicable here.

Ogata et al. (USPN 5,940,364)

The Examiner alleges that the present invention as claimed in independent claim 19 and its dependent claims 20 to 26 is disclosed by Ogata et al.

Ogata et al. merely teaches the depth of the guide grooves defined in relation to the wavelength (column 15, lines 42 to 51). Ogata et al. does not teach or suggest the features as in independent claim 28 of the present invention, i.e., the groove depth is set so that a signal of a predetermined level can be ensured for both a light beam having a short wavelength and a light beam having a long wavelength. Also, there is no suggestion from Ogata et al. to arrive at the structure claimed. See also the comment as to unexpected result, *supra*.

For the reasons set forth above, the Examiner is requested to reconsider and withdraw the rejection under 35 U.S.C. § 102.

**Third Rejection:**

Claims 18 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Utsunomiya in view of Mieda, et al. (USP 5,414,652, hereinafter "Mieda"). This rejection is traversed.

The addition of Mieda does not cure the innate deficiencies of a rejection of the base claim even though a rejection under 35 U.S.C. § 103 was used.

For the reasons set forth above, the Examiner is requested to reconsider and withdraw the rejection under 35 U.S.C. § 103.

**Fourth Rejection:**

Claim 27 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogata in view of Mieda. This rejection is traversed.

The addition of Mieda does not cure the innate deficiencies of a rejection based on Ogata for dependent claim 27.

For the reasons set forth above, the Examiner is requested to reconsider and withdraw the rejection of the claim under 35 U.S.C. § 103.

**Fifth Rejection:**

Claims 17 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Utsunomiya in view of Ogata. This rejection is traversed.

The addition of Ogata to Utsunomiya does not cure the innate deficiencies of a rejection based on Ogata for claims 17 and 33.

For the reasons set forth above, the Examiner is requested to reconsider and withdraw the rejection of the claim under 35 U.S.C. § 103.

**Reasons for Allowance:**

The Examiner has set forth reasons for allowing claims 49-52. It is noted that the total combination in the context claimed of these claims is relied on for patentability.

**Additional Art Cited:**

Although additional art was cited, as no rejection has been made on this art, no comments are considered necessary.

**Conclusion**

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Elliot A. Goldberg (Reg. No. 33,347) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.



If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By  #33335  
for Terrell C. Birch, #19,382

TCB/EAG/lab/jm  
1248-0533P

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachment(s): Abstract  
Three (3) Replacement Sheets of Drawings